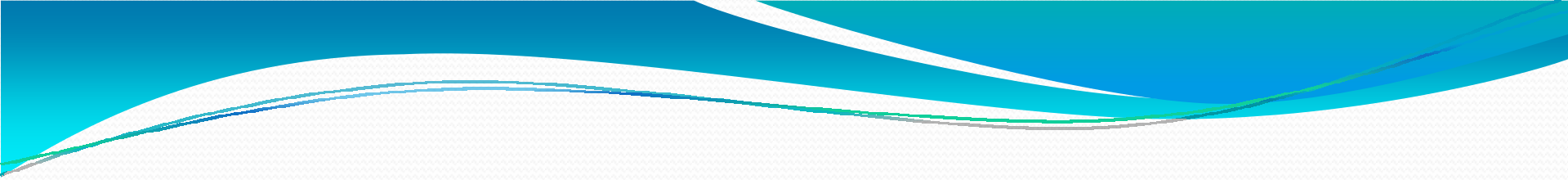


Intraoral Sutures & Techniques

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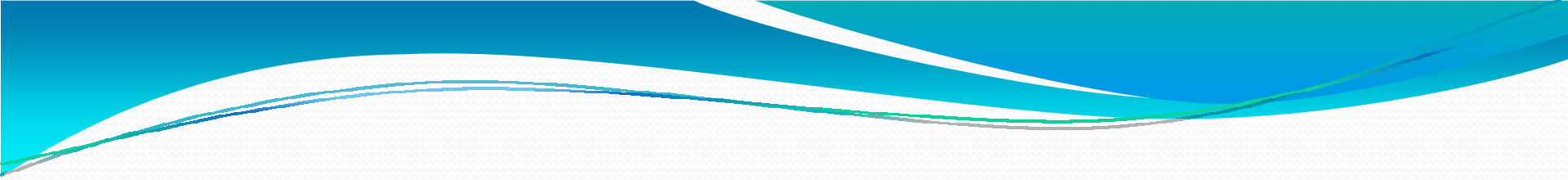
Objectives Aims

- Discuss different types of sutures materials.
- Discuss different types of suture needle.
- Explaining different types of suturing techniques and their indication and advantage



Aim of Suturing

- Reapproximating the wound edges together until the healing process is completed.
 - Protecting underlying tissues from infection or irritating factors
 - Preventing post-operative hemorrhage.
- DropBooks



Suture material

- Criteria of good suture material
 1. They must be strong
 2. Non-toxic
 3. Non-allergic
 4. Flexible (can tied & knotted easily)

Types of Sutures

I) Resorbable suture made of material which are broken down after period of time.

eg.1- Plain catgut from the serosal surface of sheep intestine.

2- Chromic catgut treated by chromic acids, last longer.

3- synthetic type as polyglycolic acid (Dexon)

Polyglactin (Vicryl) slowly absorbed

Usage: Internal body tissue.

II) Non-resorbable sutures made from material which are not metabolized by the body.

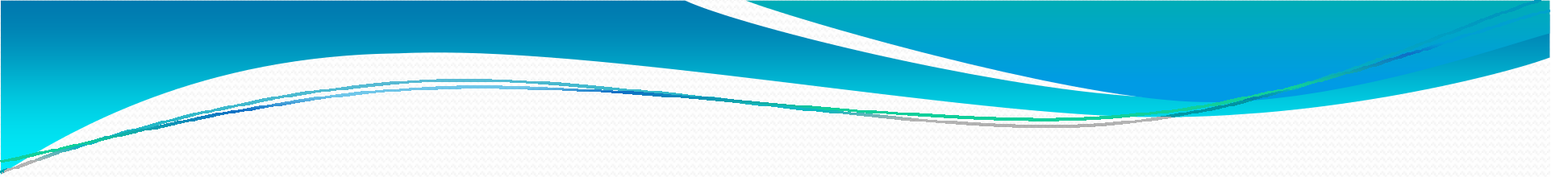
eg. Silk- Nylon – Cotton
Stainless steel.

Most used in oral cavity is black silk.

Adv: 1- easy to use.

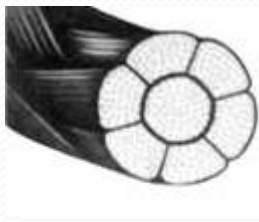
2- Economic

3- have good ability to hold a knot

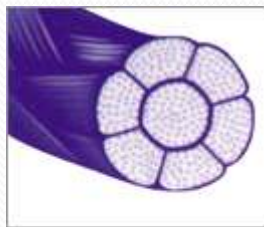
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- Children/ mentally handicapped.
 - Patients cannot return to the clinic to remove sutures

Polyfilament Sutures:

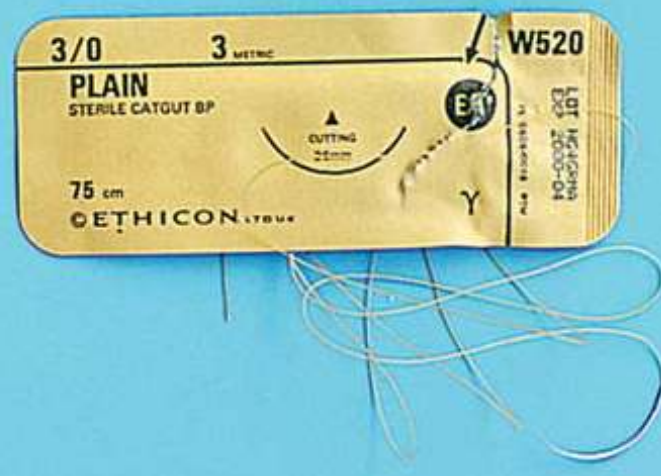
- Made of several filaments braided or twisted together such as silk (non-resorbable) and polyglycolic acid (resorbable).
- Advantage: 1- easily to tie.
- 2- cut ends are soft and non-irritating to the tongue + soft tissue.
- Disadvantage: due to multiple filaments they may carry bacteria + saliva fluids to the underlying tissue.



SILK(Braided)

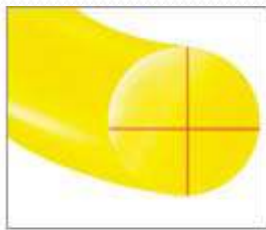


POLYGLYCOLICACID
(SYNTHETIC ABSORBABLE
-SUTURE)



Monofilament Sutures:

- It is made only of one thread such as plain, chromic catgut/ nylon/ stainless steel.
- Advantage: as this type does not absorb tissue / body fluid.
- Disadvantage: 1- difficult to tie and knotting.
2- cut ends are stiffer + more irritating the tongue + soft tissue.



PLAIN(Catgut)



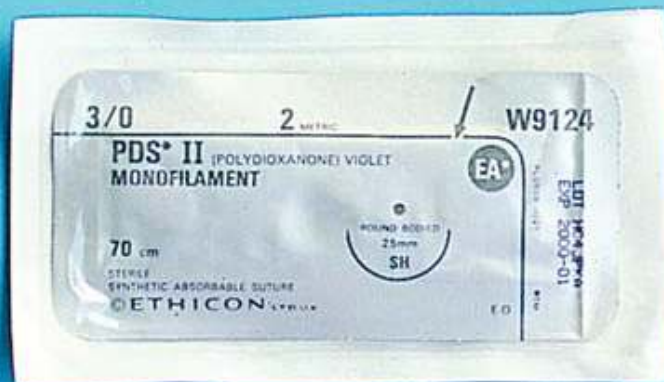
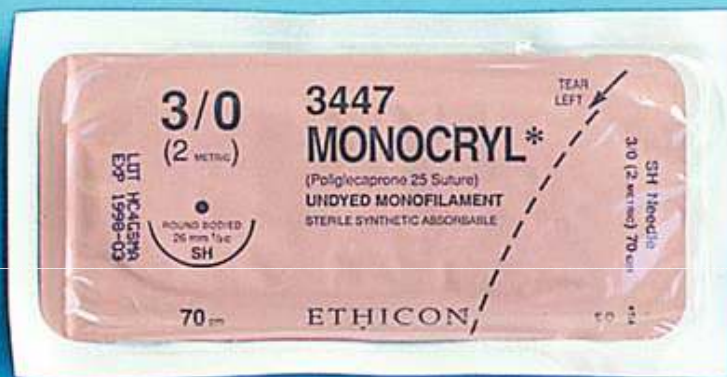
CHROMIC(Catgut)



NYLON
(Monofilament)



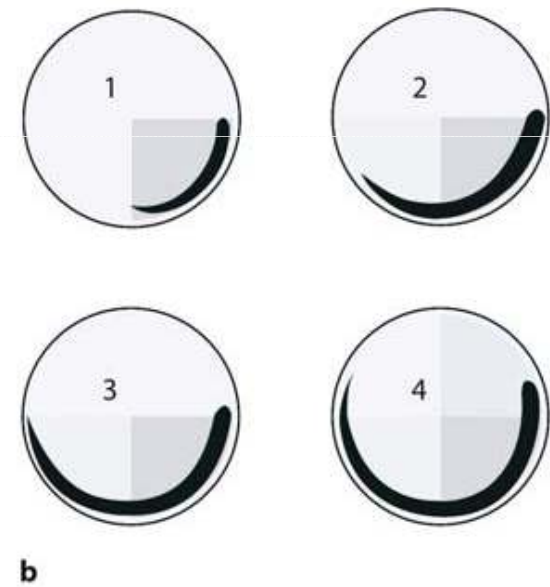
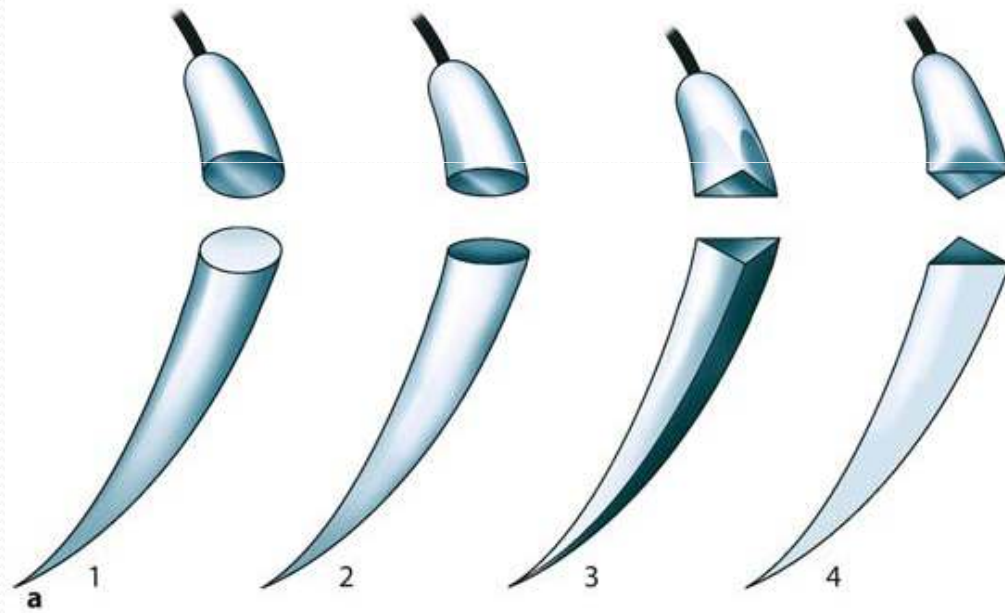
STAINLESS STEEL
WIRE(Monofilament)



a

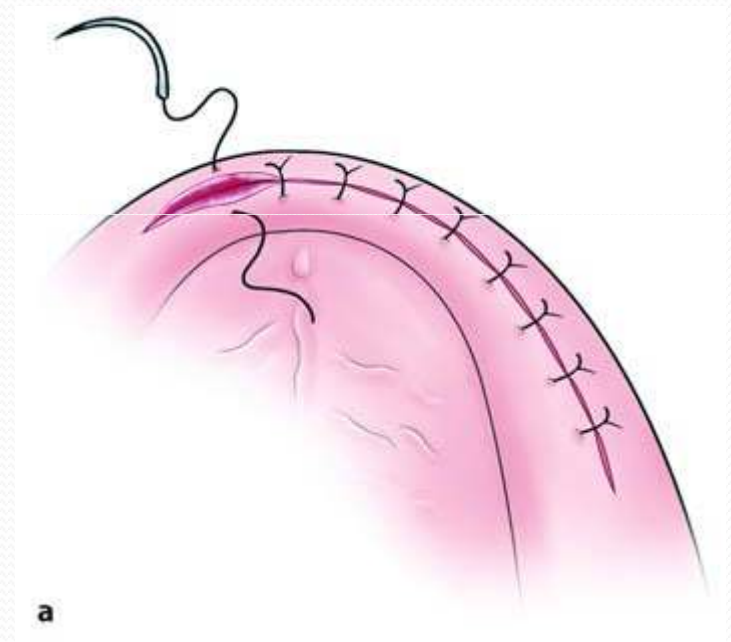
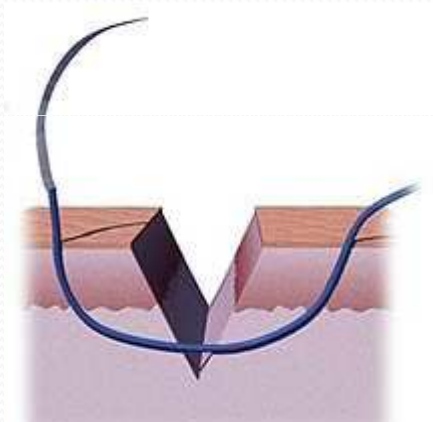
Suture Needles

- It is made of Stainless steel strong + flexible.
- It differs in Shape / Diameter/ Length.
- Shape is either Straight- Curved.
- Cross Section: 1- rounded / Oval cross section (non-cutting) is considered a traumatic + used in suturing mucosa.
- Disadvantage: pressure is required when passing through the tissues.
- 2-Triangular Cross Section (cutting) sharp cutting edge used for suturing Thicker tissue.
- Cutting is either Conventional Cutting.
- Reverse cutting outside the Semicircle.



Suturing Techniques:

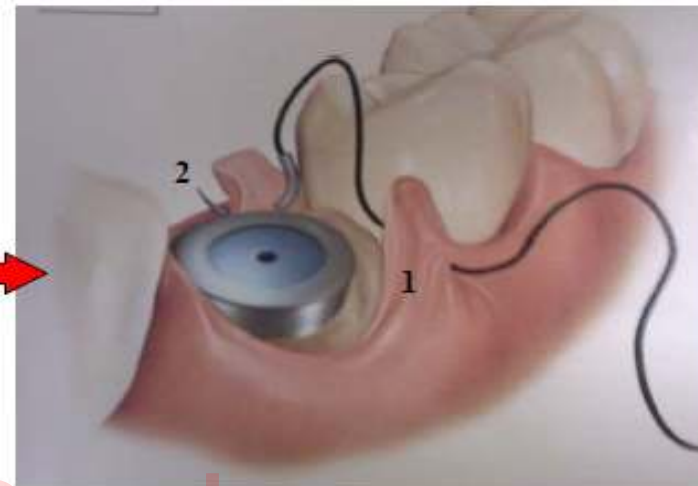
- Simple Interrupted suture. Used in small surgical procedure.
- Needle enters 5 mm. away from the margin flap and exits from the other side. Two ends of suture are tied in a knot lateral to the cut wound.
- Advantage: loosening of one or even losing one stitch will not affect the rest.



1- Simple Interrupted Suture:



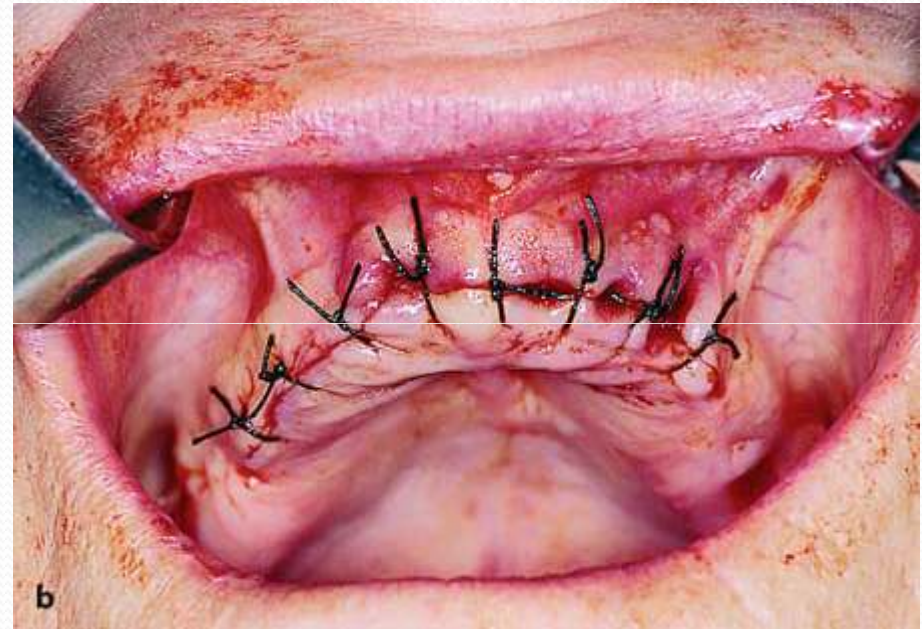
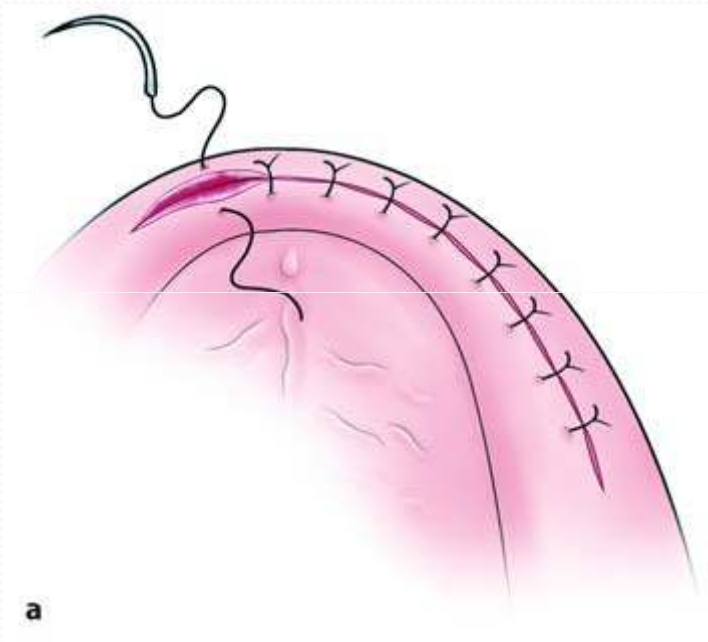
The needle enters 5 mm away from the margin of the flap



The needle exits at the same distance on the opposite side

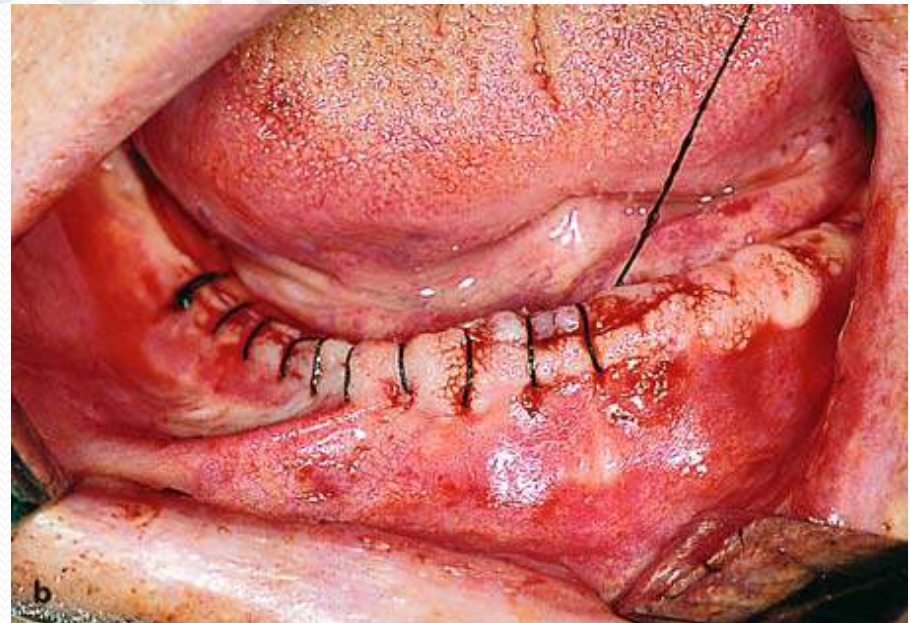
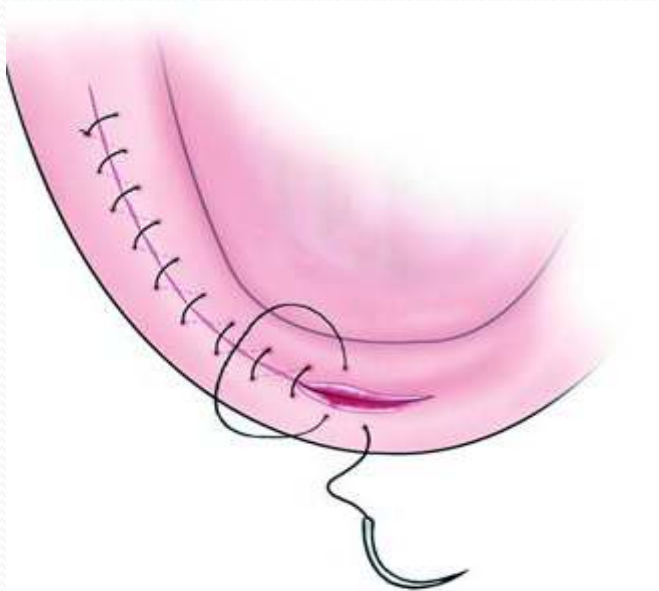


The two ends of the suture are then tied in a knot and are cut 5mm above the knot.

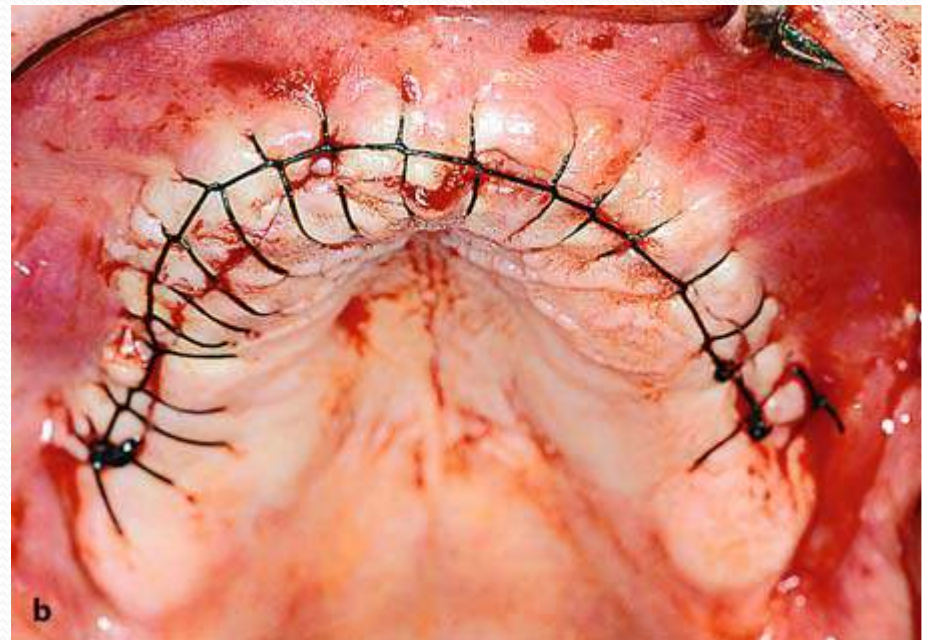
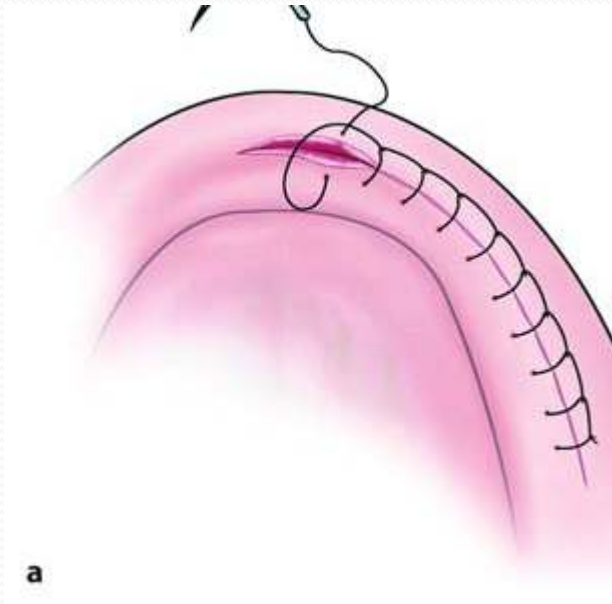


2. Continuous Simple Suture:

- Usually for suturing long incision eg. Alveoplasty in edentulous ridge.
- Knot is not made for each Stich, making the technique quick with few knots.
- Disadvantage: if one stitch get cut or lose the entire suture line becomes loose.

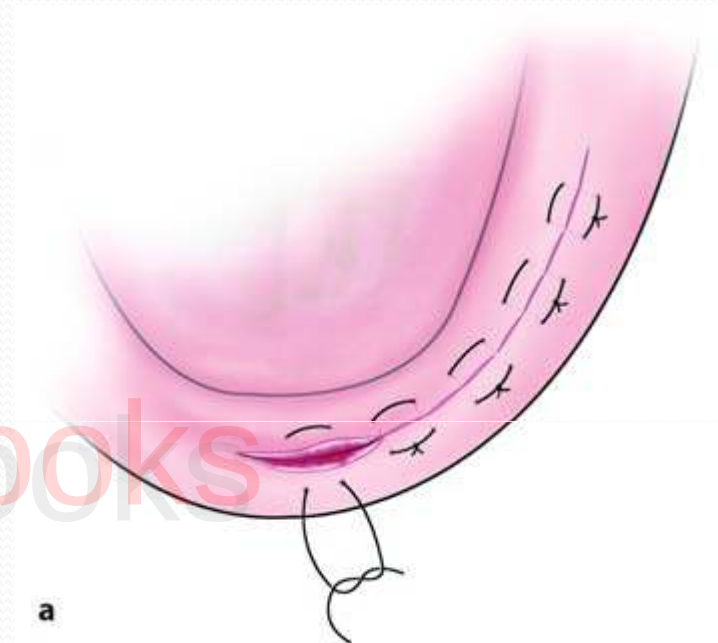
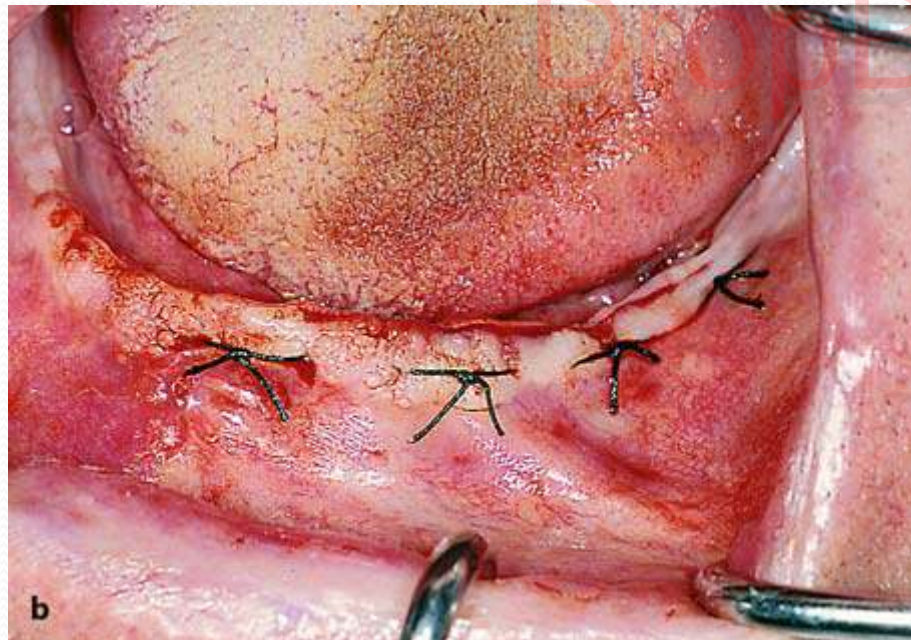


3. Continuous Locking Suture is known as Blanket / air tight suture



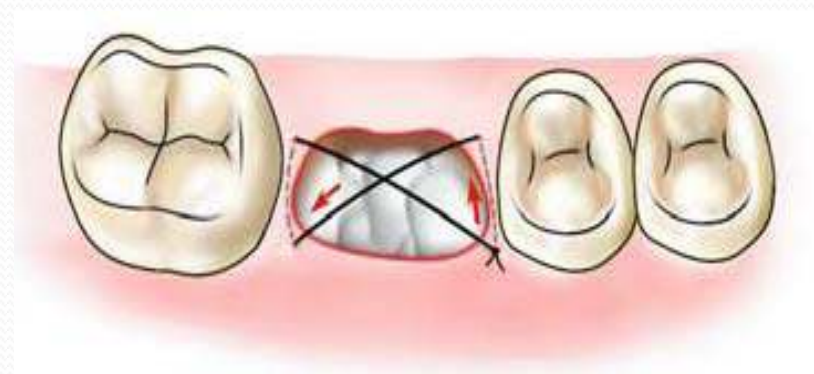
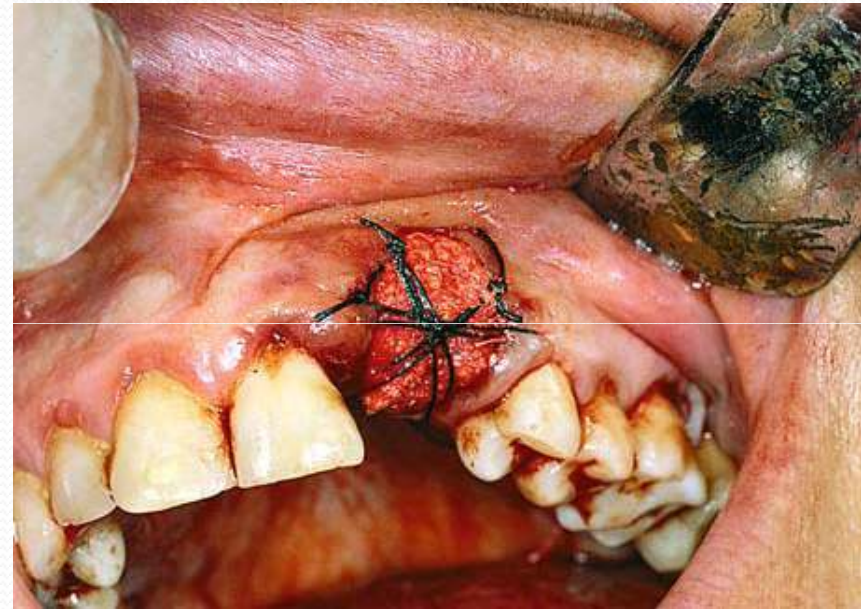
4. Horizontal Mattress Suture

- Indicated in case of strong and secure reapproximation of wound margins.



5. Figure of Eight Suture:

- This is a special technique used only Intraorally to :
 1. Maintain blood clot in the alveolar socket.
 2. Approximating the socket edges as possible.
 3. Maintain the haemostatic materials over tooth socket after extraction.



A vibrant pink flower with many petals and a dark center, positioned behind the word 'THANK'.

**THANK
YOU**